

# Notice of Allowability

Application No.

09/768,823

Examiner

Diem K. Cao

Applicant(s)

SEXTON ET AL.

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## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 1/10/2006.
2. ☒ The allowed claim(s) is/are 1-6,8-15,17-20 now renumbered 1-18.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20060313.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**WILLIAM THOMSON**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY-CENTER 2100

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Brian Hickman (Reg. No. 35,894) on March 10 2006.

2. The application has been amended as follows:
  - (a) In the specification: replace the paragraphs beginning at Page 1, line 12 and ending at Page 3, line 4, with the following paragraphs:

U.S. Patent Application Serial No. 09/248,295 entitled MEMORY MANAGEMENT SYSTEM WITHIN A RUN-TIME ENVIRONMENT, filed on February 11, 1999 by Harlan Sexton et al., which issued September 24, 2002 as U.S. Patent No. 6,457,019

U.S. Patent Application Serial No. 09/248,291 entitled MACHINE INDEPENDENT MEMORY MANAGEMENT SYSTEM WITHIN A RUN-TIME ENVIRONMENT, filed on February 11, 1999 by Harlan Sexton et al., which issued December 24, 2002 as U.S. Patent No. 6,499,095 B1;

U.S. Patent Application Serial No. 09/248,294 entitled ADDRESS CALCULATION OF INVARIANT REFERENCES WITHIN A RUN-TIME ENVIRONMENT, filed on 20 February 11, 1999 by Harlan Sexton et al., which issued April 5, 2005 as U.S. Patent No. 6,877,161;

U.S. Patent Application Serial No. 09/248,297 entitled PAGED MEMORY MANAGEMENT SYSTEM WITHIN A RUN-TIME ENVIRONMENT, filed on February 11, 1999 by Harlan Sexton et al., which issued August 13, 2002 as U.S. Patent No. 6,434,685 B1;

U.S. Patent Application Serial No. 09/320,578 entitled METHOD AND APPARATUS FOR ACCESSING PAGED OBJECTS USING A FAST DIVISION TECHNIQUE, filed on May 27, 1999 by Harlan Sexton et al., which issued June 4, 2002 as U.S. Patent No. 6,401,185;

U.S. Patent Application Serial No. 09/512,619 entitled METHOD FOR MANAGING MEMORY USING EXPLICIT, LAZY INITIALIZATION IN A RUN-TIME ENVIRONMENT, filed on February 25, 2000 by Harlan Sexton et al., which issued March 23, 2004 as U.S. Patent No. 6,711,657 B1;

U.S. Patent Application Serial No. 09/512,622 entitled METHOD FOR MANAGING MEMORY USING ACTIVATION-DRIVEN INITIALIZATION IN A RUN-TIME ENVIRONMENT, filed on February 25, 2000 by Harlan Sexton et al., which issued August 5, 2003 as U.S. Patent No. 6,604,182;

U.S. Patent Application Serial No. 09/512,621 entitled SYSTEM AND METHODOLOGY FOR SUPPORTING A PLATFORM INDEPENDENT OBJECT FORMAT FOR A RUN-TIME ENVIRONMENT, filed on February 25, 2000 by Harlan Sexton et al.;

U.S. Patent Application Serial No. 09/512,618 entitled METHOD AND APPARATUS FOR MANAGING SHARED MEMORY IN A RUN-TIME ENVIRONMENT, filed on February 25, 2000 by Harlan Sexton et al., which issued December 7, 2004 as U.S. Patent No. 6,829,761; and

U.S. Patent Application Serial No. 09/512,620 entitled USING A VIRTUAL MACHINE INSTANCE AS THE BASIC UNIT OF USER EXECUTION IN A SERVER ENVIRONMENT, filed on February 25, 2000 by Harlan Sexton et al., which issued February 8, 2005 as U.S. Patent No. 6,854,114.

The present application is related to the following commonly-assigned co-pending U.S. Patent Application Serial No. 09/408,847 entitled METHOD AND ARTICLE FOR MANAGING REFERENCES TO EXTERNAL OBJECTS IN A RUNTIME ENVIRONMENT, filed on September 30, 1999 by Harlan Sexton et al., which issued May 13, 2005 as U.S. Patent No. 6,564,223 B1.

(b) In the claims:

- In claim 10, at line 1, before “medium”, insert “storage--”, and replace “carrying” with “stores--”.
- In claim 15, at line 1, before “medium”, insert “storage--”, and replace “carrying” with “stores--”.

3. The following is an examiner’s statement of reasons for allowance:

As to claims 1-5, 10-14, and 19-20, the prior art of record does not teach or render obvious the limitations recited in claims 1 and 10, when taken in the context of the claims as a whole, specific to a method for accessing an instance of recreatable object in a shorter-duration memory based on a reference to the instance of the recreatable object located in a longer-duration memory, wherein the shorter-duration memory is associated with a call, comprising the steps of locating within the shorter-duration memory, a context structure wherein a portion of the context structure is passed to the call, locating an XREF pointers array based on the data cached within the context structure, determining whether the XREF pointers array includes a pointer associated with the reference to the instance of the recreatable object, and if it is, follow the pointer to locate the instance within the shorter-duration memory.

As to claims 6-9 and 15-18, the prior art of record does not teach or render obvious the limitations recited in claims 6 and 15, when taken in the context of the claims as a whole, specific to a method for accessing an instance of recreatable object in a shorter-duration memory based on a reference to the instance of the recreatable object located in a longer-duration memory, wherein the shorter-duration memory is associated with a call, comprising the steps of generating an object for a class in a shorter-duration memory when the class is activated, storing

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within the object data for locating instances of recreatable objects associated with the class, the data includes a pointer to an XREF pointers array, to dereference the reference, determine that the reference is associated with the class, and using the data within the object to locate the instance of the recreatable object.

Moreover, evidence for modifying the prior art teachings by one of ordinary skill level in the art was not uncovered so as to result in the invention as recited in claims 1, 6, 10 and 15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 5:30AM - 2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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